

# LAPORAN TUGAS PEMROGRAMAN BERBASIS FRAMEWORK

Modul 7  
REDUX dan HOC

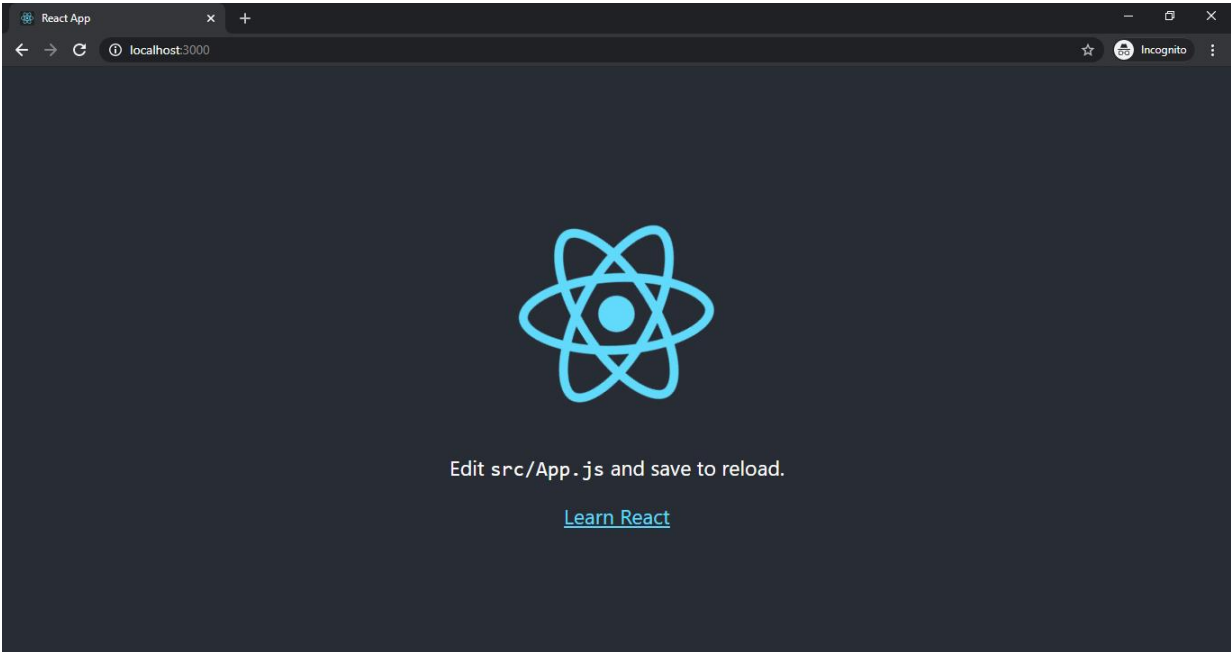


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## Praktikum – Bagian 1: Instalasi Redux

Langkah	Keterangan
1	<p>Buat dan install redux</p> <p><code>npx create-react-app contact-redux</code></p> <p><code>npm install -g create-react-app</code></p> <p><code>create-react-app contact-redux</code></p> <p><code>npm start</code></p> <pre> PS D:\data\Users\User\Documents\College\Framework Prog\framework_prog\7thWeek&gt; npx create-react-app contact-redux npx: installed 67 in 11.981s  Creating a new React app in D:\data\Users\User\Documents\College\Framework Prog\framework_prog\7thWeek\contact-redux.  Installing packages. This might take a couple of minutes. Installing react, react-dom, and react-scripts with cra-template...  &gt; core-js@2.6.12 postinstall D:\data\Users\User\Documents\College\Framework Prog\framework_prog\7thWeek\contact-redux\node_modules\babel-runtime\node_modules\core-js &gt; node -e "try{require('./postinstall')}catch(e){}"  &gt; core-js@3.9.1 postinstall D:\data\Users\User\Documents\College\Framework Prog\framework_prog\7thWeek\contact-redux\node_modules\core-js  PS D:\data\Users\User\Documents\College\Framework Prog\framework_prog\7thWeek&gt; cd contact-redux PS D:\data\Users\User\Documents\College\Framework Prog\framework_prog\7thWeek\contact-redux&gt; npm install -g create-react-app C:\Users\mycomp\AppData\Roaming\npm\create-react-app -&gt; C:\Users\mycomp\AppData\Roaming\npm\node_modules\create-react-app\index.js + create-react-app@4.0.3 added 67 packages from 25 contributors in 4.531s PS D:\data\Users\User\Documents\College\Framework Prog\framework_prog\7thWeek\contact-redux&gt; </pre>  <p>Install Form</p> <p><code>npm install --save redux react-redux redux-form</code></p> <pre> PS D:\data\Users\User\Documents\College\Framework Prog\framework_prog\7thWeek\contact-redux&gt; npm install --save redux react-redux redux-form npm WARN tsutils@3.21.0 requires a peer of typescript@&gt;=2.8.0    &gt;= 3.2.0-dev    &gt;= 3.3.0-dev    &gt;= 3.4.0-dev    &gt;= 3.5.0-dev    &gt;= 3.6.0-dev    &gt;= 3.6.0-beta    &gt;= 3.7.0-dev    &gt;= 3.7.0-beta but none is installed. You must install peer dependencies yourself. npm WARN redux-form@8.3.7 requires a peer of react@^16.4.2 but none is installed. You must install peer dependencies yourself. npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.3.2 (node_modules\fsevents): npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"}) npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.13 (node_modules\watchpack-chokidar2\node_modules\fsevents): npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.13: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"}) npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.13 (node_modules\webpack-dev-server\node_modules\fsevents): npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.13: wanted {"os":"darwin","arch":"any"} (current: {"os":"win32","arch":"x64"}) + redux@4.0.5 </pre>

## Ubah file index.html pada folder /public/index.html

```
contact-redux > src > <> index.html > ...
1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <meta charset="utf-8" />
5      <meta
6        name="viewport"
7        content="width=device-width, initial-scale=1, shrink-to-fit=no"
8      />
9      <meta name="theme-color" content="#000000" />
10
11     <link rel="manifest" href="%PUBLIC_URL%/manifest.json" />
12     <link rel="shortcut icon" href="%PUBLIC_URL%/favicon.ico" />
13     <link
14       rel="stylesheet"
15       href="https://cdnjs.cloudflare.com/ajax/libs/bulma/0.6.2/css/bulma.min.css"
16     />
17
18     <title>React App</title>
19   </head>
20   <body>
21     <noscript> You need to enable JavaScript to run this app. </noscript>
22     <div id="root"></div>
23   </body>
24 </html>
25
```

## Ubah file App.js pada folder /src/App.js

```
contact-redux > src > JS App.js > ...
1  import React, { Component } from "react";
2  import { reduxForm, Field } from "redux-form";
3  import logo from "../logo.svg";
4  import "../App.css";
5  let SignInForm = (props) => {
6    const { handleSubmit } = props;
7    return (
8      <form onSubmit={handleSubmit} className="form">
9        <div className="field">
10          <div className="control">
11            <Field
12              name="firstName"
13              component={renderField}
14              type="text"
15              label="First Name"
16            />
17          </div>
18        </div>
19        <div className="field">
20          <div className="control">
21            <Field
22              name="lastName"
23              component={renderField}
24              type="text"
25              label="Last Name"
26            />
27          </div>
28        </div>
29        <div className="field">
30          <div className="control">
31            <Field
32              name="email"
33              component={renderField}
34              type="email"
35              label="Email Address"
36            />
37          </div>
38        </div>
39        <div className="field">
40          <div className="control">
41            <Field name="age" component={renderField} type="number" label="Age" />
42          </div>
43        </div>
44        <div className="field">
45          <div className="control">
46            <label className="label">Proficiency</label>
47            <div className="select">
48              <Field className="input" name="proficiency" component="select">
49                <option />
50                <option value="beginner">Beginner Dev</option>
51                <option value="intermediate">Intermediate Dev</option>
52                <option value="expert">Expert Dev</option>
53              </Field>
54            </div>
55          </div>
56        </div>
57      </form>
58    );
59  };
60
```

contact-redux > src > JS App.js > ...

```
55     </div>
56   </div>
57   <div className="field">
58     <div className="control">
59       <label className="label">Gender</label>
60       <label className="radio">
61         <Field name="gender" component="input" type="radio" value="male" />{" "}
62         Male
63       </label>
64       <label className="radio">
65         <Field
66           name="gender"
67           component="input"
68           type="radio"
69           value="female"
70         />{" "}
71         Female
72       </label>
73     </div>
74   </div>
75   <div className="field">
76     <div className="control">
77       <label className="checkbox">
78         <Field
79           name="saveDetails"
80           id="saveDetails"
81           component="input"
82           type="checkbox"
```

contact-redux > src > JS App.js > ...

```
82         type="checkbox"
83       />
84       Save Details
85     </label>
86   </div>
87 </div>
88 <div className="field">
89   <div className="control">
90     <label className="label">Message</label>
91     <Field className="textarea" name="message" component="textarea" />
92   </div>
93 </div>
94 <div className="field">
95   <div className="control">
96     <button className="button is-link">Submit</button>
97   </div>
98 </div>
99 </form>
100 );
101 };
102 const validate = (val) => {
103   const errors = {};
104   if (!val.firstName) {
105     console.log("First Name is required");
106     errors.firstName = "Required";
107   }
108   if (!val.lastName) {
109     console.log("Last Name is required");
```

contact-redux > src > JS App.js > ...

```
109     console.log("Last Name is required");
110     errors.lastName = "Required";
111   }
112   if (!val.email) {
113     console.log("email is required");
114     errors.email = "Required";
115   } else if (!/^.+@.+$/.test(val.email)) {
116     console.log("email is invalid");
117     errors.email = "Invalid email address";
118   }
119   if (!val.age) {
120     errors.age = "Required";
121   } else if (isNaN(Number(val.age))) {
122     errors.age = "Must be a number";
123   } else if (Number(val.age) < 18) {
124     errors.age = "Sorry, you must be at least 18 years old";
125   }
126   return errors;
127 };
128 const renderField = ({
129   input,
130   label,
131   type,
132   meta: { touched, error, warning },
133 }) => (
134   <div>
135     <div className="control">
136       <label className="field">{label}</label>
```

contact-redux > src > JS App.js > ...

```
136     <label className="field">{label}</label>
137     <input className="input" {...input} placeholder={label} type={type} />
138     {touched &&
139       ((error && <span>{error}</span>) ||
140        (warning && <span>{warning}</span>))}
141   </div>
142 </div>
143 );
144 SignInForm = reduxForm({
145   form: "signIn",
146   validate,
147 })(SignInForm);
148 class App extends Component {
149   handleSignIn = (values) => {
150     console.log(values);
151   };
152   render() {
153     return (
154       <div className="App">
155         <header className="App-header">
156           <img src={logo} className="App-logo" alt="logo" />
157           <h1 className="App-title">Welcome to React x redux-form</h1>
158         </header>
159         <div className="container">
160           <p className="App-intro">Contact Form</p>
161           <SignInForm onSubmit={this.handleSignIn} />
162         </div>
163       </div>
164     );
165   }
166 }
167 export default App;
```

contact-redux > src > JS App.js > ...

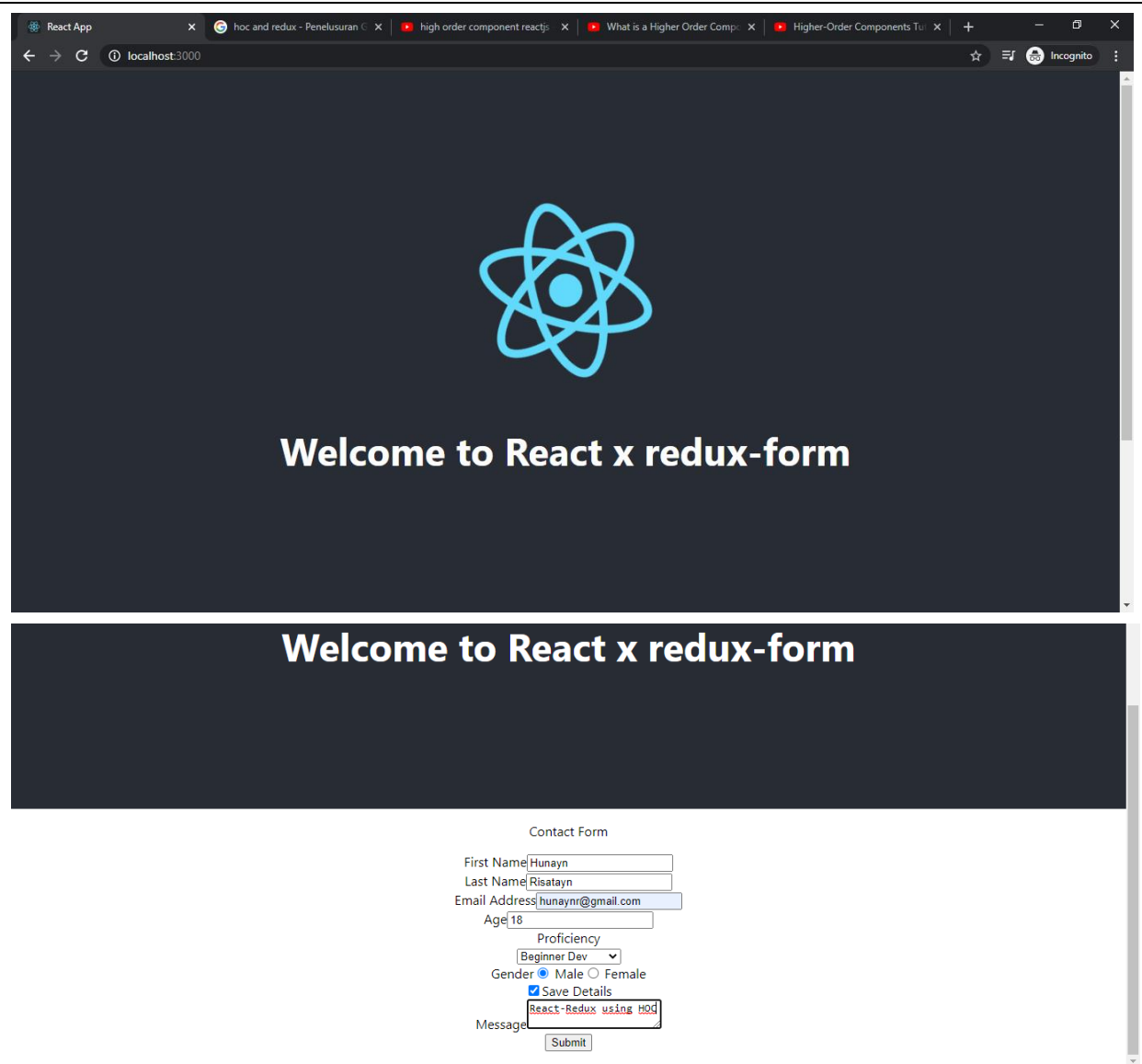
```
152   render() {
153     return (
154       <div className="App">
155         <header className="App-header">
156           <img src={logo} className="App-logo" alt="logo" />
157           <h1 className="App-title">Welcome to React x redux-form</h1>
158         </header>
159         <div className="container">
160           <p className="App-intro">Contact Form</p>
161           <SignInForm onSubmit={this.handleSignIn} />
162         </div>
163       </div>
164     );
165   }
166 }
167 export default App;
```

## Ubah file /src/index.js

contact-redux > src > JS index.js > ...

```
1 import React from "react";
2 import ReactDOM from "react-dom";
3 import { createStore, combineReducers } from "redux";
4 import { Provider } from "react-redux";
5 import { reducer as formReducer } from "redux-form";
6 import "./index.css";
7 import App from "./App";
8 import registerServiceWorker from "./registerServiceWorker";
9 const rootReducer = combineReducers({
10   form: formReducer,
11 });
12 const store = createStore(rootReducer);
13 ReactDOM.render(
14   <Provider store={store}>
15     <App />
16   </Provider>,
17   document.getElementById("root")
18 );
19 registerServiceWorker();
20
```

Running hasilnya dan buatlah laporan



Keterangan :

1. Importing redux ke dalam react app

```
3 import { createStore, combineReducers } from "redux";
4 import { Provider } from "react-redux";
5 import { reducer as formReducer } from "redux-form";
```

2. Mengkoneksikan Form ke redux form

```
contact-redux > src > JS App.js > renderField
144 SignInForm = reduxForm({
145   form: "signIn"
146 })(SignInForm);
```

3. Validasi redux form ke dalam Higher Order Component

```
contact-redux > src > JS App.js > App > render
144 SignInForm = reduxForm({
145   form: "signIn",
146   validate,
147 })(SignInForm);
```

#### 4. Membangun HOC dalam form redux

```
contact-redux > src > JS Appjs > App > render
128 const renderField = ({
129   input,
130   label,
131   type,
132   meta: { touched, error, warning },
133 }) => (
134   <div>
135     <div className="control">
136       <label className="field">{label}</label>
137       <input className="input" {...input} placeholder={label} type={type} />
138       {touched &&
139         ((error && <span>{error}</span>) ||
140          (warning && <span>{warning}</span>))}
141     </div>
142   </div>
143 );
```



Link GitHub : [https://github.com/hunaynr/framework\\_prog/tree/main/7thWeek](https://github.com/hunaynr/framework_prog/tree/main/7thWeek)

Link Youtube : <https://youtu.be/n7JR-HxbYUQ>

